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10/698,391	11/03/2003	Osamu Otsuka	DP-977 US	2731

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EXAMINER

PHAM, TUAN

ART UNIT	PAPER NUMBER
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2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/698,391

Applicant(s)

OTSUKA, OSAMU

Examiner

TUAN A. PHAM

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remark, filed on 04/18/2007, with respect to the rejection(s) of claim(s) 1-26 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chen et al. (U.S. Pub. No.: 2001/0000221).

Claim Objections

2. Claims 3-4, 12 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 5-6, and 13. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Admitted Prior Art, hereinafter, "APA" in view of Chen et al. (U.S. Pub. No.:

2001/0000221, hereinafter, "Chen").

Regarding claim 1, APA teaches mobile radio equipment comprising (see figure

1):

a radio transmitter/receiver for transmitting/receiving radio data (see figure 1, element 2);

a transmission unit for converting the received data received by the radio transmitter/receiver (see figure 1, element 3);

an application unit for executing applications (see element 4);

a decoder for decoding the data output from the transmission unit (see figure 1, element 5); a memory for storing the decoded data output from the decoder (see figure 1, element 7); and

an input/output section for inputting/outputting the decoded data output from the decoder (see figure 1, element 6, pages 1-3).

It should be noticed that APA fails to teach a load data output section for outputting the decoded data output from the decoder as load data; a load data input section for inputting the decoded data output from the decoder as load data; a judge section for judging the load data on a preset threshold value; and a transmission controller for controlling transmission rate based on a judgment made by the judge section. However, Chen teaches a load data output section for outputting the decoded data output from the decoder as load data (see figure 4, the data transfer to processor 330 at the output decoder, [0051-0053]); a load data input section for inputting the decoded data output from the decoder as load data (see figure 4, the data receive at the decoder, [0042-0044]); a judge section for judging the load data on a preset threshold

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value (see figure 4, the receive data compare with threshold, [0051-0052]); and a transmission controller for controlling transmission rate based on a judgment made by the judge section (see figure 4, [0043-0052]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chen into view of APA in order to improve detecting zero rate frames in a data transmission as suggested by Chen at [0003].

Regarding claims 3 and 5, Chen further teaches a comparator for comparing the load data with the threshold value in order to judge whether or not the amount of the data is within a capacity of the mobile radio equipment to process (see figure 4, [0051-0052]).

Regarding claim 7, Chen further teaches the judge section includes a comparator for comparing the load data input from the decoder with the threshold values in order to judge whether or not the amount of the data is within a capacity of the mobile radio equipment to process (see figure 4, [0051-0053]); the transmission controller requests a base station to reduce the data transmission rate when the load data exceeds the threshold value; and the transmission controller requests the base station to increase the data transmission rate when the load data is below the threshold value (see [0043]).

Regarding claim 9, Chen further teaches the judge section is provided with two threshold values, one for judging whether or not the load data is beyond the a decoding capability of the decoder, and the other for judging whether or not the load data is

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beneath the decoding capability; the judge section includes a comparator for comparing the load data input from the decoder with the threshold values in order to judge whether or not the amount of the data is within the a capacity of the mobile radio equipment to process; the transmission controller requests a base station to reduce the data transmission rate when the load data exceeds one of the threshold values; and the transmission controller requests the base station to increase the data transmission rate when the load data is below the other threshold value (see figure 4, [0042-0053]).

Regarding claim 2, APA teaches mobile radio equipment comprising (see figure 1):

a radio transmitter/receiver for transmitting/receiving radio data (see figure 1, element 2);

a transmission unit for converting the received data received by the radio transmitter/receiver (see figure 1, element 3);

an application unit for executing applications (see element 4);

a decoder for decoding the data output from the transmission unit (see figure 1, element 5); a memory for storing the decoded data output from the decoder (see figure 1, element 7); and

an input/output section for inputting/outputting the decoded data output from the decoder (see figure 1, element 6, pages 1-3).

It should be noticed that APA fails to teach a load data output section for outputting the decoded data output from the decoder as load data; a load data input section for inputting the decoded data output from the decoder as load data; a judge

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section for judging the load data on a preset threshold value and for judging whether or not a frame loss has occurred in the decoded data; and a transmission controller for controlling transmission rate based on a judgment made by the judge section. However, Chen teaches a load data output section for outputting the decoded data output from the decoder as load data (see figure 4, the data transfer to processor 330 at the output decoder, [0051-0053]); a load data input section for inputting the decoded data output from the decoder as load data (see figure 4, the data receive at the decoder, [0042-0044]); a judge section for judging the load data on a preset threshold value (see figure 4, the receive data compare with threshold, [0051-0052]) and for judging whether or not a frame loss has occurred in the decoded data (see [0043]); and a transmission controller for controlling transmission rate based on a judgment made by the judge section (see figure 4, [0043-0052]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chen into view of APA in order to improve detecting zero rate frames in a data transmission as suggested by Chen at [0003].

Regarding claims 4 and 6, Chen further teaches a comparator for comparing the load data with the threshold value in order to judge whether or not the amount of the data is within a capacity of the mobile radio equipment to process (see figure 4, [0051-0052]).

Regarding claim 8, Chen further teaches the judge section includes a comparator for comparing the load data input from the decoder with the threshold

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values in order to judge whether or not the amount of the data is within a capacity of the mobile radio equipment to process (see figure 4, [0051-0053]); the transmission controller requests a base station to reduce the data transmission rate when the load data exceeds the threshold value; and the transmission controller requests the base station to increase the data transmission rate when the load data is below the threshold value (see [0043]).

Regarding claim 10, Chen further teaches the judge section is provided with two threshold values, one for judging whether or not the load data is beyond the a decoding capability of the decoder, and the other for judging whether or not the load data is beneath the decoding capability; the judge section includes a comparator for comparing the load data input from the decoder with the threshold values in order to judge whether or not the amount of the data is within the a capacity of the mobile radio equipment to process; the transmission controller requests a base station to reduce the data transmission rate when the load data exceeds one of the threshold values; and the transmission controller requests the base station to increase the data transmission rate when the load data is below the other threshold value (see figure 4, [0042-0053]).

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5. Claims 11-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pub. No.: 2001/0000221, hereinafter, "Chen") in view of Kovacevic (Pub. No.: US 2002/0178274).

Regarding claim 11, Chen teaches a transmission rate controlling method of mobile radio equipment for controlling a rate of radio data transmission (see figure 1) between mobile radio equipment (see figure 3, mobile station) and a base station (see figure 2, base station), the method comprising:

a decoding step for decoding encoded data (see figure 4, decoding unit 322);
and

a transmission controlling step for controlling the rate of transmission to/from a base station based on a judgment made at the judging step (see [0043]).

It should be noticed that Chen fails to teach a judging step for judging whether or not decoding has been performed in time. However, Kovacevic teaches such features (see figure 1, [0019], in this case, elements 150 and 160 as a whole).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kovacevic into view of Chen in order to prevent the data loss when the system is overflow.

Regarding claim 15, Chen further teaches a comparing step for comparing the decoded data output from the decoder as load data with one or more preset threshold values, the judging step including the process of judging whether or not the load data is beyond a decoding capability of the decoder based on the comparison result obtained at the comparing step (see [0051-0053]).

Regarding claim 19, Chen further teaches the a process of requesting the base station to reduce the data transmission rate when the load data exceeds the threshold value at the comparing step, and a process of requesting the base station to increase the data transmission rate when the load data is below the threshold value (see [0043, 0051-0053]).

Regarding claim 23, Kovacevic further teaches the judging step for judging whether or not decoding has been performed in time comprises judging whether or not decoding has been performed without delay (see [0019], when buffer is full and will not receive any more data so that it will delay the process).

Regarding claims 12 and 13, Chen teaches a transmission rate controlling method of mobile radio equipment for controlling a rate of radio data transmission (see figure 1) between mobile radio equipment (see figure 3, mobile station) and a base station (see figure 2, base station), the method comprising:

a decoding step for decoding encoded data according to the encoded data input into a decoder (see figure 4, decoding unit 322);

a transmission controlling step for controlling the rate of transmission to/from a base station based on a judgment made at the judging step (see [0043]); and

an inputting/outputting step for inputting/outputting the decoded data output from the decoder in a format suitable for the input data (see [0007, 0028], the decoder will decode with association rate that receive at input and output with the same rate for transmission).

It should be noticed that Chen fails to teach a judging step for judging whether or not decoding has been performed in time. However, Kovacevic teaches such features (see figure 1, [0019], in this case, elements 150 and 160 as a whole).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kovacevic into view of Chen in order to prevent the data loss when the system is overflow.

Regarding claims 16-17, Chen further teaches a comparing step for comparing the decoded data output from the decoder as load data with one or more preset threshold values, the judging step including the process of judging whether or not the load data is beyond a decoding capability of the decoder based on the comparison result obtained at the comparing step (see [0051-0053]).

Regarding claims 20-21, Chen further teaches the a process of requesting the base station to reduce the data transmission rate when the load data exceeds the threshold value at the comparing step, and a process of requesting the base station to increase the data transmission rate when the load data is below the threshold value (see [0043, 0051-0053]).

Regarding claims 24-25, Kovacevic further teaches the judging step for judging whether or not decoding has been performed in time comprises judging whether or not decoding has been performed without delay (see [0019], when buffer is full and will not receive any more data so that it will delay the process).

Regarding claim 14, Chen teaches a transmission rate controlling method of mobile radio equipment for controlling a rate of radio data transmission (see figure 1) between mobile radio equipment (see figure 3, mobile station) and a base station (see figure 2, base station), the method comprising:

a decoding step for decoding encoded data according to the encoded data input into a decoder (see figure 4, decoding unit 322);

a detecting step for detecting whether or not the decoding result is normal ([0043]);

a transmission controlling step for controlling the rate of transmission to/from a base station based on a judgment made at the judging step (see [0043]); and

an inputting/outputting step for inputting/outputting the decoded data output from the decoder in a format suitable for the input data (see [0007, 0028], the decoder will decode with association rate that receive at input and output with the same rate for transmission).

It should be noticed that Chen fails to teach a judging step for judging whether or not decoding has been performed in time. However, Kovacevic teaches such features (see figure 1, [0019], in this case, elements 150 and 160 as a whole).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kovacevic into view of Chen in order to prevent the data loss when the system is overflow.

Regarding claim 18, Chen further teaches a comparing step for comparing the decoded data output from the decoder as load data with one or more preset threshold

values, the judging step including the process of judging whether or not the load data is beyond a decoding capability of the decoder based on the comparison result obtained at the comparing step (see [0051-0053]).

Regarding claim 22, Chen further teaches the a process of requesting the base station to reduce the data transmission rate when the load data exceeds the threshold value at the comparing step, and a process of requesting the base station to increase the data transmission rate when the load data is below the threshold value (see [0043, 0051-0053]).

Regarding claim 26, Kovacevic further teaches the judging step for judging whether or not decoding has been performed in time comprises judging whether or not decoding has been performed without delay (see [0019], when buffer is full and will not receive any more data so that it will delay the process).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology 2600

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June 22, 2007

Examiner



Tuan Pham